

Version 4.1

Revision Date 02/08/2017

Print Date 03/21/2017

Zepinc

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name	:	Zep Brake Wash 55GL
Material number	:	00000000000050585
Manufacturer or supplier's d	leta	ils
Company	:	Zep Inc.
Address	:	1310 Seaboard Industrial Blvd., NW Atlanta, GA 30318
Telephone	:	404-352-1680

Emergency telephone numbers

For SDS Information	:	Compliance Services 1-877-428-9937
For a Medical Emergency	:	877-541-2016 Toll Free - All Calls Recorded
For a Transportation	:	CHEMTREC: 800-424-9300 - All Calls Recorded.
Emergency		In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

Recommended use

: Degreaser Vehicle Maintenance

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Colour	clear
Odour	hydrocarbon-like

GHS Classification

Flammable liquids Skin irritation Specific target organ toxicity - single exposure	: Category 2 : Category 2 : Category 1
Specific target organ toxicity - single exposure Aspiration hazard	: Category 3 (Central nervous system) : Category 1
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	 H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H336 May cause drowsiness or dizziness.



Version 4.1	Revision Date 02/08/2017	Print Date 03/21/2017
	H370 Causes damage to organs.	
Precautionary statements	 Prevention: P210 Keep away from heat/spark No smoking. P233 Keep container tightly close P240 Ground/bond container and P241 Use explosion-proof electri equipment. P242 Use only non-sparking tool P243 Take precautionary measu P260 Do not breathe dust/fume/ P264 Wash skin thoroughly after P270 Do not eat, drink or smoke P271 Use only outdoors or in a v P280 Wear protective gloves/ ey Response: P301 + P310 IF SWALLOWED: CENTER/doctor. P303 + P361 + P353 IF ON SKIN immediately all contaminated clo water/shower. P304 + P340 + P312 IF INHALED and keep comfortable for breathin CENTER/doctor if you feel unwel P307 + P311 IF exposed: Call a physician. P331 Do NOT induce vomiting. P332 + P313 If skin irritation occ attention. P362 Take off contaminated clot P370 + P378 In case of fire: Use alcohol-resistant foam to extingui Storage: P403 + P235 Store in a well-vent tightly closed. P403 + P235 Store in a well-vent Dispose of contents/container in regulation. 	ed. d receiving equipment. cal/ ventilating/ lighting/ s. res against static discharge. gas/ mist/ vapours/ spray. handling. when using this product. vell-ventilated area. e protection/ face protection. Immediately call a POISON N (or hair): Take off thing. Rinse skin with D: Remove person to fresh air ng. Call a POISON I. POISON CENTER or doctor/ urs: Get medical advice/ hing and wash before reuse. dry sand, dry chemical or ish. ilated place. Keep container ilated place. Keep cool.

ZepInc

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
Naphtha (petroleum), hydrotreated light	64742-49-0	>= 70 - < 90
propan-2-ol	67-63-0	>= 5 - < 10
heptane	142-82-5	>= 1 - < 5
methanol	67-56-1	>= 1 - < 5

The exact percentages of disclosed substances are withheld as trade secrets.

Zep Brake Wash 55GL Version 4.1



Print Date 03/21/2017

SECTION 4. FIRST AID MEASURES

General advice	: Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.	
If inhaled	: If breathed in, move person into fresh air. Remove person to fresh air. If signs/symptoms continue, get medical attention.	t
In case of skin contact	 If skin irritation persists, call a physician. Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. 	
In case of eye contact	 Rinse immediately with plenty of water, also under the eyelic for at least 15 minutes. Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist. Keep eye wide open while rinsing. 	,st
If swallowed	 Keep respiratory tract clear. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital. 	
Most important symptoms and effects, both acute and delayed	 Effects are dependent on exposure (dose, concentration, contact time). Effects are immediate and delayed. Symptoms may include shortness of breath, dry cough, and irritation of the nose, eyes, lips, mouth, and throat. Symptoms may include irritation, redness, pain, and rash. Causes damage to organs. Causes skin irritation. May cause drowsiness or dizziness. Review section 2 of SDS to see all potential hazards. 	
Notes to physician	: Treat symptomatically. Symptoms may be delayed.	

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: Do not allow run-off from fire fighting to enter drains or water courses.

Zep brake wash bogL		
Version 4.1	Revision Date 02/08/2017	Print Date 03/21/2017
Hazardous combustion	: Carbon dioxide (CO2)	
products	Carbon monoxide Smoke	
Specific extinguishing	: Use extinguishing measures that ar	e appropriate to local
methods	circumstances and the surrounding	
Further information	: Collect contaminated fire extinguish must not be discharged into drains.	ing water separately. This
	Fire residues and contaminated fire be disposed of in accordance with I	
	For safety reasons in case of fire, c separately in closed containments.	-
	Use a water spray to cool fully close	ed containers.
Special protective equipment for firefighters	: In the event of fire, wear self-contain	ned breathing apparatus.

Zepinc

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	 Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	 Avoid formation of aerosol. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Container may be opened only under exhaust ventilation hood. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	:	No smoking.



Version 4.1	Revision Date 02/08/2017	Print Date 03/21/2017
	Keep container tightly closed in a c place. Containers which are opened must kept upright to prevent leakage. Observe label precautions. Electrical installations / working ma the technological safety standards.	t be carefully resealed and atterials must comply with
Materials to avoid	: Keep away from oxidizing agents a materials. Do not freeze.	and strongly acid or alkaline
Storage temperature	: 5 - 40 °C	

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m3	NIOSH REL
		ST	500 ppm 1,225 mg/m3	NIOSH REL
		TWA	400 ppm 980 mg/m3	OSHA Z-1
		TWA	400 ppm 980 mg/m3	OSHA P0
		STEL	500 ppm 1,225 mg/m3	OSHA P0
		PEL	400 ppm 980 mg/m3	CAL PEL
		STEL	500 ppm 1,225 mg/m3	CAL PEL
heptane	142-82-5	TWA	85 ppm 350 mg/m3	NIOSH REL
		С	440 ppm 1,800 mg/m3	NIOSH REL
		TWA	500 ppm 2,000 mg/m3	OSHA Z-1
		TWA	400 ppm 1,600 mg/m3	OSHA P0
		STEL	500 ppm 2,000 mg/m3	OSHA P0
		PEL	400 ppm 1,600 mg/m3	CAL PEL
		STEL	500 ppm 2,000 mg/m3	CAL PEL
methanol	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
	Ī	TWA	200 ppm	NIOSH REL



Version 4.1

Revision Date 02/08/2017

Print Date 03/21/2017

1	1	260 mg/m3	1
	ST	250 ppm 325 mg/m3	NIOSH REL
	TWA	200 ppm 260 mg/m3	OSHA Z-1
	STEL	250 ppm 325 mg/m3	OSHA P0
	TWA	200 ppm 260 mg/m3	OSHA P0
	С	1,000 ppm	CAL PEL
	PEL	200 ppm 260 mg/m3	CAL PEL
	STEL	250 ppm 325 mg/m3	CAL PEL

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
PROPAN-2-OL	67-63-0	Acetone	Urine	End of shift at end of workwee k	40 mg/l	ACGIH BEI
Methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI

Engineering measures

: effective ventilation in all processing areas

Personal protective equipment

Respiratory protection	:	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Hand protection Material Remarks		Protective gloves Skin should be washed after contact. For prolonged or repeated contact use protective gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	:	Ensure that eyewash stations and safety showers are close to the workstation location. Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	:	Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Protective measures	:	Wear suitable protective equipment.



Zep Brake Wash 55GL

Version 4.1	Revision Date 02/08/2017	Print Date 03/21/2017
	When using do not eat, drink or smol	ke.
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at th	e end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: clear
Odour	: hydrocarbon-like
Odour Threshold	: No data available
рН	: Not applicable
Melting point/freezing point	: No data available
Boiling point	: 64 °C
Flash point	: -18 °C Method: TCC
Evaporation rate	: No data available
	No data available
Upper explosion limit	: 11.6 %(V)
Lower explosion limit	: 1.2 %(V)
Vapour pressure	: 178.65 hPa (20 °C)
Relative vapour density	: No data available
Density	: 0.7 g/cm3
Bulk density	: No data available
Solubility(ies)	
Water solubility	: insoluble
Solubility in other solvents	: insoluble
Partition coefficient: n- octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available

Zep Brake Wash 55GL Version 4.1

Print Date 03/21/2017

ZepInc

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition Symptoms of Overexposure	 None known. Effects are dependent on exposure (dose, concentration, contact time). Effects are immediate and delayed. Symptoms may include shortness of breath, dry cough, and irritation of the nose, eyes, lips, mouth, and throat. Symptoms may include irritation, redness, pain, and rash.
Carcinogenicity:	
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Acute toxicity	
Product:	
Acute oral toxicity	: Acute toxicity estimate : 3,217 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : 102.52 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method



Version 4.1

Revision Date 02/08/2017

Print Date 03/21/2017

Zepinc

Acute dermal toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method
Components:	
propan-2-ol:	: LD50 Oral Rat: 4,396 mg/kg
Acute oral toxicity	Method: Calculation method
heptane:	: LC50 Rat: 103 mg/l
Acute inhalation toxicity	Exposure time: 4 h

Skin corrosion/irritation

Product:

Remarks: Irritating to skin.

Serious eye damage/eye irritation

Product:

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Naphtha (petroleum), hydrotreated light: propan-2-ol: heptane: methanol:

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:



Version 4.1

Revision Date 02/08/2017

Print Date 03/21/2017

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity	
No data available	
Persistence and degradability	
No data available Bioaccumulative potential	
Product:	
octanol/water <u>Components:</u> heptane :	Remarks: No data available
octanol/water	log Pow: 5
Mobility in soil	
No data available	
Other adverse effects	
No data available <u>Product:</u>	
Regulation	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks	This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
Additional ecological : information	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Very toxic to aquatic life., May cause long lasting harmful effects to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	 The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with



Version 4.1		Revision Date 02/08/2017	Print Date 03/21/2017
		chemical or used container. Dispose of in accordance with local reg	ulations.
Contaminated packaging	 Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum. 		he empty drum.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA): UN1993, Flammable liquids, n.o.s., (HEPTANE, ISOPROPANOL), 3, II

Transportation Regulation: IMDG (Vessel): UN1993, FLAMMABLE LIQUID, N.O.S., (HEPTANE, ISOPROPANOL), 3, II

Transportation Regulation: IATA (Cargo Air): UN1993, Flammable liquid, n.o.s., (HEPTANE, ISOPROPANOL), 3, II

Transportation Regulation: IATA (Passenger Air): UN1993, Flammable liquid, n.o.s., (HEPTANE, ISOPROPANOL), 3, II

Transportation Regulation: TDG (Canada): UN1993, FLAMMABLE LIQUID, N.O.S., (HEPTANE, ISOPROPANOL), 3, II

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
methanol	67-56-1	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	: Fire Hazard Acute Health Hazard
SARA 302	: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.



Version 4.1	Revision Date 02/08/2017	Print Da	ate 03/21/2017
SARA 313	: The following components are subject to reporting levels established by SARA Title III, Section 313:		levels
	methanol	67-56-1	2.9342 %
California Prop 65	WARNING! This product contains a contains a contains a contains a contains a contains to cause cancer.	chemical know	n to the
benzene		71-43-2	
	WARNING: This product contains a c State of California to cause birth defe harm.		
methanol		67-56-1	
toluene		108-88-3	
benzene		71-43-2	

The components of this product are reported in the following inventories:

TSCA	On TSCA Inventory	
DSL	All components of this product are on the Canadian	DSL

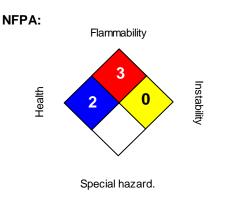
For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION

Further information



HMIS III:

HEALTH	3
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic

OSHA - GHS Label Information:



Signal word Hazard statements

Hazard pictograms

Highly flammable liquid and vapour. May be fatal if sw allowed and enters airways. Causes skin irritation. May cause drow siness or dizziness. Causes damage to organs.



Zep Brake Wash 55GL

Version 4.1	Revision Date 02/08/2017	Print Date 03/21/2017
Precautionary statements	:	
	 Prevention: Keep aw ay from heat/sparks/open flames container tightly closed. Ground/bond container and recexplosion-proof electrical/ventilating/lighting/equipme Take precautionary measures against static discharge mist/vapours/spray. Wash skin thoroughly after handl w hen using this product. Use only outdoors or in a wel gloves/eye protection/face protection. Response: IF SWALLOWED: Immediately call a POISt SKIN (or hair): Take off immediately all contaminated c w ater/shower. IF INHALED: Remove person to fresh a breathing. Call a POISON CENTER/doctor if you feel u POISON CENTER or doctor/physician. Do NOT induc occurs: Get medical advice/attention. Take off contam reuse. In case of fire: Use dry sand, dry chemical or ald extinguish. Storage: Store in a w ell-ventilated place. Keep contain ventilated place. Keep cool. 	ceiving equipment. Use nt. Use only non-sparking tools. b. Do not breathe dust/fume/gas/ ing. Do not eat, drink or smoke I-ventilated area. Wear protective ON CENTER/doctor. IF ON dothing. Rinse skin with ir and keep comfortable for inw ell. IF exposed: Call a e vomiting. If skin irritation inated clothing and w ash before cohol-resistant foam to mer tightly closed. Store in a w ell-

Version:	4.1
Revision Date:	02/08/2017
Print Date:	03/21/2017

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®,Zep Professional®, Enforcer®, National Chemical[™], Selig[™], Misty®, Next Dimension[™], Petro®, i-Chem®, TimeMist®, TimeWick[™], MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National[™], FC Forward Chemicals®,Rexodan®, Mykal[™], and a number of private labeled brands.